



The State of Utah

Department of
Natural Resources

Division of
Oil, Gas & Mining

ROBERT L. MORGAN
Executive Director

LOWELL P. BRAXTON
Division Director

OLENE S. WALKER
Governor

GAYLE F. McKEACHNIE
Lieutenant Governor

Representatives Present During the Inspection:

OGM Steven Fluke Environmental Scientist II
OGM Justin Eatchel Coal Intern

Inspection Report

Permit Number:	C0410002
Inspection Type:	TECHNICAL
Inspection Date:	May 20, 2004
Start Date/Time:	05/20/2004 11:00:00 AM
End Date/Time:	05/20/2004 3:00:00 PM
Last Inspection:	

Inspector: Steven Fluke, Environmental Scientist II

Weather: overcast, cool ~60 F, breezy, scattered showers

InspectionID Report Number: 287

Accepted by: dhaddock
06/23/2004

OK

Permittee: **CANYON FUEL COMPANY LLC**

Operator: **CANYON FUEL COMPANY LLC**

Site: **SUFCO MINE**

Address: **397 S 800 W, SALINA UT 84654**

County: **SEVIER**

Permit Type: **PERMANENT COAL PROGRAM**

Permit Status: **ACTIVE**

Current Acreages

24,632.95	Total Permitted
27.36	Total Disturbed
	Phase I
	Phase II
	Phase III

Mineral Ownership

- ☒ Federal
☒ State
☐ County
☐ Fee
☐ Other

Types of Operations

- ☒ Underground
☐ Surface
☐ Loadout
☐ Processing
☐ Reprocessing

Report summary and status for pending enforcement actions, permit conditions, Division Orders, and amendments:

Steve Fluke and Justin Eatchel (a summer intern at DOGM) visited the upper reaches of the Main Fork of Box Canyon to observe subsidence fractures within the stream channel. Although the fractures had been observed and documented in the past by DOGM and in a joint trip with DOGM, BLM, and USFS (10/7/2003), no finding had been made by DOGM regarding material damage to the stream channel. It was the intent of this visit to reexamine these fractures and determine if material damage, or loss of value or use of the stream channel, as defined in R645-301-500.525.120, has occurred. Based on this site visit, it is of my opinion that no such damage has occurred.

Inspector's Signature:

Stu Fluke

Date

June 01, 2004

Steven Fluke, Environmental Scientist II

Inspector ID Number: 53

Note: This inspection report does not constitute an affidavit of compliance with the regulatory program of the Division of Oil, Gas and Mining.

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Inspection Continuation Sheet

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REVIEW OF PERMIT, PERFORMANCE STANDARDS, PERMIT CONDITION REQUIREMENTS

1. Substantiate the elements on this inspection by checking the appropriate performance standard.
 - a. For COMPLETE inspections provide narrative justification for any elements not fully inspected unless element is not appropriate to the site, in which case check Not Applicable.
 - b. For PARTIAL inspections check only the elements evaluated.
2. Document any noncompliance situation by reference the NOV issued at the appropriate performance standard listed below.
3. Reference any narratives written in conjunction with this inspection at the appropriate performance standard listed below.
4. Provide a brief status report for all pending enforcement actions, permit conditions, Division Orders, and amendments.

	Evaluated	Not Applicable	Comment	Enforcement
1. Permits, Change, Transfer, Renewal, Sale	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Signs and Markers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Topsoil	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.a Hydrologic Balance: Diversions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.b Hydrologic Balance: Sediment Ponds and Impoundments	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.c Hydrologic Balance: Other Sediment Control Measures	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.d Hydrologic Balance: Water Monitoring	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.e Hydrologic Balance: Effluent Limitations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Explosives	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Disposal of Excess Spoil, Fills, Benches	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Coal Mine Waste, Refuse Piles, Impoundments	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Noncoal Waste	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Protection of Fish, Wildlife and Related Environmental Issues	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Slides and Other Damage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Contemporaneous Reclamation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Backfilling And Grading	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Revegetation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Subsidence Control	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cessation of Operations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.a Roads: Construction, Maintenance, Surfacing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.b Roads: Drainage Controls	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Other Transportation Facilities	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Support Facilities, Utility Installations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. AVS Check	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Air Quality Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Bonding and Insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Other	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

10. Slides and Other Damage

Justin and I entered the Main Fork of Box Canyon at the drainage below the Crazy Bird Shelter. It was evident that water had flowed in the stream channel recently probably from scattered showers from the past couple of days. The stream is not perennial at its upper reaches where it had been undermined in 1999 and standing water was observed only in a few pools and potholes. Descending down stream, seven sites with significant fracturing within the stream channel were documented and observations recorded and photographed. Photographs are located on the DOGM database and can be found at
M://Files/Coal/Permits/041/0410002/Images/05202004.

Site 1: The first pool encountered in channel was located beneath a slickrock ledge. The pool was approximately 4' x 6' with about 12" standing water and a muddy/sandy bottom. No cracks were observed in the slickrock surrounding the pool area. Photos. GPS – N 38o 59' 11", W 111o 21' 10".

Site 2: Approximately 63' downstream of Site 1 is a series of small potholes in the slickrock then an eight-foot drop to a pool. The potholes ranged from 8" to 16" in diameter. The first two potholes contained no water but were damp inside as though they had recently drained. A couple of relatively new hairline cracks cut through the potholes that may have caused them to drain. The cracks appear recent and subsidence related but are starting to weather with more rounded edges, sand infilling, and some vegetation growth. A third pothole is holding water and the fourth is dry. The pool has a muddy/sandy bottom, is approximately 10' in diameter but holds water only at the west side (approximately 5' x 3' x 10"). The pool has vegetation growing approximately 6" above water level indicating that standing water does not get much higher. Photos.

Site 3: Narrow box canyon beyond potholes and pool with approximately 15' sandstone walls. A crack cuts across the sandstone walls on either side of muddy/sandy channel bottom. Can't tell if crack intersects stream channel beneath sediment. Photos of crack on each side of stream channel.

Site 4: Beyond narrow stretch of canyon, a sandstone bedrock shelf has collapsed into a dry pool area. The collapse of the shelf has occurred since last fall and appears to be due to continued settling from subsidence. I don't know if the pool held water prior to the collapse. One photo.

Site 5: Approximately 60' downstream of collapsed shelf is a series of large potholes in slickrock. All the potholes contained no standing water but were damp indicating they recently drained. There were many recent and old cracks in slickrock around and within the potholes. Three photos.

Site 6: Down canyon approximately 200', the canyon walls have collapsed and are choking the stream channel with rubble and trees. It is unsafe to continue in the channel here and must be climbed around. The collapse was here last year but

appears to have increased in size. Spalling continues in the canyon five years after it was undermined. Photo.

Site 7: Approximately 100' downstream of large collapsed area are some cracks within stream channel up to one-inch wide. Also, an area where the rock is broken-up and fractured is located along the stream channel here. Flowing water can be diverted in these cracks and fractures. Photos. GPS - N 38° 59' 15", W 111° 21' 3".

22. Other

Conclusion and Comment: There are many fractures within the sandstone walls of the upper reaches of Box Canyon including some identified within the stream channel. The cracks range from hairline fractures to two-inches wide. The few cracks identified within the stream channel are generally hairline to one-quarter inch wide. Because the upper reaches of Box Canyon are not perennial and no pre-mining study of the stream channel hydrology was conducted, it is difficult to determine if standing water in potholes or intermittent flow following storm events is lost to subsidence caused fractures.

Based on my observations from this and previous site visits, it appears that no loss of value or use of the stream channel, as defined in R645-301-500.525.120, has occurred.